

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/052996 A3

(51) International Patent Classification⁷: **C30B 7/14**

(21) International Application Number:
PCT/US2004/038807

(22) International Filing Date:
19 November 2004 (19.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/523,235 19 November 2003 (19.11.2003) US

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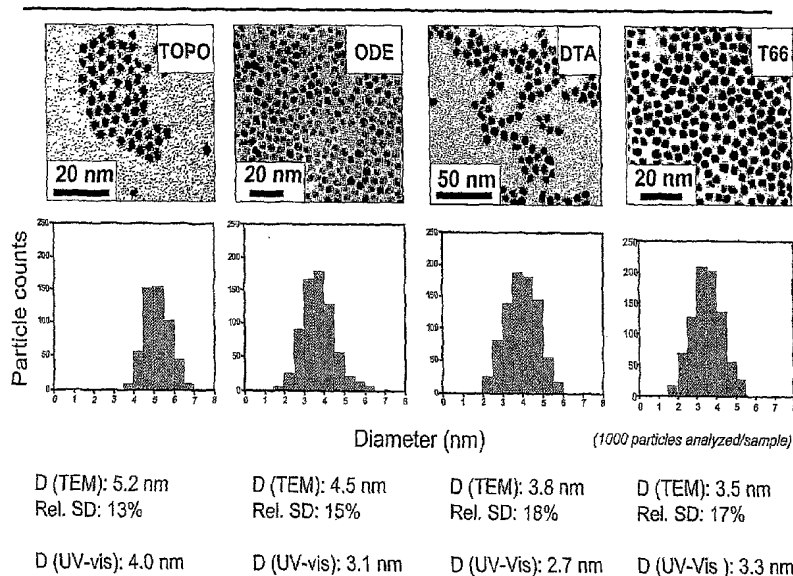
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: METHODS AND MATERIALS FOR CDSE NANOCRYSTAL SYNTHESIS



(57) Abstract: New methods for the synthesis of nanocrystals/quantum dots are disclosed. The methods comprise use of reasonably-priced and commercially available heat transfer fluids (such as Dowtherm® A) as solvents to synthesize CdSe nanocrystals. Separation of nucleation and growth is achieved by quenching the reaction solution with relatively cold (room temperature) solvent to lower the solution temperature. Quenching may be followed by raising the solution temperature, to allow controlled growth to take place.

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European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
27 October 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/38807

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C30B 7/14

US CL : 117/11, 68; 977/Dig.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 117/11, 68; 977/Dig.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,045,930 (THOMPSON et al) 04 April 2000 (04.04.2000), disclosure, especially col. 4 -11.	1-46
A	US 6,232,264 B1 (LUKEHART et al) 15 May 2001 (15.05.2001), entire document	1-46
A	US 6,721,083 B2 (JACOBSON et al) 13 April 2004 (13.04.2004), column 34.	1-46
A	US 2003/0096113 A1 (JACOBSON et al) 22 May 2003 (22.05.2003), columns 6-7.	1-46

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☐ See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

05 July 2005 (05.07.2005)

Date of mailing of the international search report

09 SEP 2005

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